

Claim Amendments

Please amend the claims as follows:

1. (Amended) A method of studying the infectivity of a pathogen in tissues comprising the steps of:

- isolating host cells;
- placing said isolated host cells into a bioreactor comprising culture medium;
- applying sedimental shear stress to the cells in the cell culture to form a three-dimensional tissue mass;
- seeding the formed tissue mass in a tissue culture vessel;
- introducing an infectious pathogen into said three-dimensional tissue mass; and
- assaying the infectivity of said infectious pathogen.

13. (Amended) A method of measuring the chemosensitivity of tissues to a toxic materials comprising:

- isolating host cells;
- placing said isolated host cells into a bioreactor comprising culture medium;
- applying sedimental shear stress to the cells in the cell culture to form a three-dimensional tissue mass;
- seeding the formed tissue mass in a tissue culture vessel;
- introducing a toxic material into said three-dimensional tissue mass; and
- assaying the chemosensitivity of said toxic material.

23. (Amended) A method of measuring the chemosensitivity of tissues to a toxic materials comprising:

- isolating human renal epithelial cells;
- placing said isolated human renal epithelial cells into a bioreactor comprising culture medium;
- applying sedimental shear stress to the cells in the cell culture to form a three-dimensional tissue mass;
- seeding the formed tissue mass in a tissue culture vessel;
- treating the three dimensional tissue mass with a toxic material; and
- assaying the chemosensitivity of said toxic material.